From: "Coffey, Scott" < CoffeySE@cdmsmith.com>

To: "Zhen, Davis" <Zhen.Davis@epa.gov>

"Sheldrake, Sean" <sheldrake.sean@epa.gov>

CC: younghs@cdmsmith.com Date: 4/28/2018 7:45:58 AM

Subject: FW: Interim Modifications to Surface Grab Sampling - to EPA and Field Staff

Hi Davis.

My immediate concern with Anne's email is her last statement that this plan just "proposed" by her last night is "an approach that will get us through the next few days' and her earlier statement explaining that she Ccd Howard and I "so the weekend crews are aligned" all of which I interpret as implementing her new approach this weekend.

Anne still doesn't seem to understand that this is not following a proper collaborative process of presenting a proposal for change in field procedures, allowing EPA time to review, provide input and approve it before moving forward with a revised plan.

From: Anne Fitzpatrick < AFitzpatrick@Geosyntec.com>

Sent: Friday, April 27, 2018 9:53 PM

To: Zhen, Davis (Zhen.Davis@epa.gov) <Zhen.Davis@epa.gov>; Coffey, Scott <CoffeySE@cdmsmith.com>; Howard

Young <younghs@cdm.com>

Cc: Keith Kroeger < KKroeger@Geosyntec.com>; Moody, Nicky < nicky.moody@aecom.com>; Tyrrell, Ken

<ken.tyrrell@aecom.com>

Subject: Interim Modifications to Surface Grab Sampling - to EPA and Field Staff

Dear Davis,

On behalf of Ken Tyrrell and the Pre-RD AOC Group, we are proposing the following "interim" modifications to the approved surface sediment FSP regarding samples under 20 cm and acceptance criteria. Per our discussion today via phone, this interim solution can be shared with all field crews to make sure we are on the same page. These recommended changes are based on (a) field conditions that we are encountering, (b) our decision flow chart sent Friday April 21, and (c) your email dated Monday April 23 with requested changes to field sampling plan. We'll schedule a tech-to-tech call next week to further discuss/resolve. Per your request, Scott and Howard are cc'd so the weekend crews are aligned.

- While at primary location,
 - o If all subsamples are > 20 cm, then collect sample and analyze
 - If the average recovery depth is > 20 cm and all subsamples are > 10 cm minimum, then collect sample and analyze (make sure all weights were used to maximize penetration depths) (up to 5 attempts)
 - If the average depth is between 10 and 20 cm, then collect one sample and archive, pending further discussion with EPA (make sure all weights were used)
 - If debris or gravel-related refusal encountered (i.e., jaws aren't closing), then sequentially proceed at 25 ft radius, then 50 ft radius for additional attempts. (If we jump right to 50 ft radius, then provide reason in field notes)
 - If dense sand hard bottom/low penetration (i.e., less than 10 cm) repeatedly encountered, then skip this Sample ID location station and revisit later after discussion with EPA.
 - If bedrock hard bottom is encountered, then skip Primary Location and move directly to Alternate Location 1
- Go to Alternate 1 Location
 - If access or safety issues with the Primary Location
 - If debris or gravel-related refusal (i.e., jaws aren't closing) up to 50 ft radius after several attempts at Primary Location
 - If bedrock hard bottom at Primary Location.
- At Alternate 1 Location
 - If all subsamples are > 20 cm, then collect sample and analyze; discard primary archived sample
 - o If the average recovery depth is > 20 cm and all subsamples are > 10 cm minimum, then collect sample

- and analyze (make sure all weights were used to maximize penetration depths) (up to 5 attempts);
 discard primary archived sample
 - If the average depth is between 10 and 20 cm, continue processing the Primary Location and Archive; hold pending discussion with EPA on next steps.
- Go to Alternate 2 Location only if
 - o If access or safety issues with the Alternative 1 Location
 - Lots of debris related refusal (i.e., jaws aren't closing) at Alternate 1 Location.
- At Alternate 2 Location
 - o If all subsamples are > 20 cm, then collect sample and analyze; discard primary archived sample
 - If the average recovery depth is > 20 cm and all subsamples are > 10 cm minimum, then collect sample and analyze (make sure all weights were used to maximize penetration depths) (up to 5 attempts); discard primary archived sample
 - If the average depth is between 10 and 20 cm, continue processing the Primary Location and Archive; hold pending discussion with EPA on next steps.
- We propose collecting/analyzing one sample per Sample ID location. This sample will be analyzed, archived, or the Sample ID location will be skipped until later if equipment bias is suspected.

This approach should get us through the next few days until our next tech-to-tech call to discuss a final path forward.

Regards, Anne

Anne Fitzpatrick, LHG

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Ken Tyrrell

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